

Abstract

The present invention provides for a method and apparatus for using the complete resource capacity of a synchronous digital hierarchy infrastructure, with a protection system, in the presence of a data (packet) network, in which the complete SDH/SONET protection (spare) capacity is used to carry data traffic in both normal and failure conditions.

In case of failure the working capacity is cut, and the TDM traffic is subject to a protection mechanism and is shifted over the protection capacity; the part of high (and medium) priority data traffic is shifted over the protection capacity; a part of the data low-priority extra-traffic (transported over the protection capacity in normal conditions) will share the remaining protection capacity with the low-priority best-effort part of the data traffic transported over the working capacity.